Evaluation Technical Assistance Brief

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Learn, Innovate, Improve (LI^2): How Regional Partnership Grantees Can Use a Continuous Quality Improvement Framework to Support Program Implementation and Evaluation

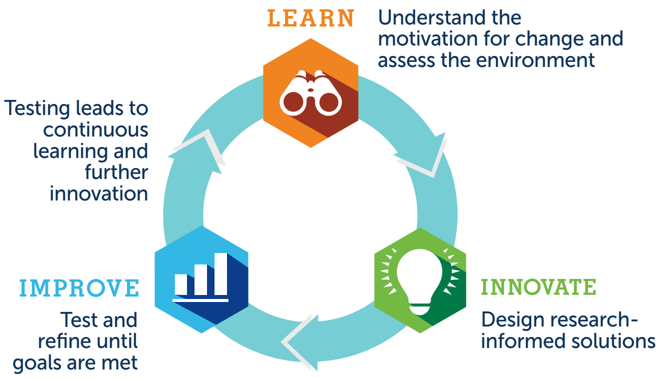
Under the Regional Partnership Grant (RPG) program, organizations from child welfare, substance use treatment, mental health, judicial, and other systems form partnerships and work collaboratively to increase the well-being and enhance the safety of children in or at risk of out-of-home placement as a result of a parent's or caretaker's substance misuse. RPG projects implement services to improve child safety and well-being, family functioning, and adult recovery outcomes and conduct local evaluations to assess outcomes for program participants. To successfully deliver services to families with complex needs and conduct local evaluations, RPG projects monitor their efforts and problem-solve as challenges arise.

This brief describes one approach that RPG projects can use to support successful partnerships, service delivery, and evaluations: the Learn, Innovate, Improve framework—or LI^2. LI^2 is a framework and process for continuous quality improvement (CQI) that brings together existing research, data, and practice expertise.[1] It draws from implementation science, human-centered design, and other improvement processes.[2] The framework intends to help people understand challenges, identify potential program or evaluation improvements, and iteratively test these improvements. LI^2 is collaborative and aims to bring together staff at different levels and organizations to co-design improvements and engage in the CQI processes.

Who should read this brief?

The Children's Bureau in the Administration for Children and Families, U.S. Department of Health and Human Services, funded this brief for groups that receive a Regional Partnership Grant or for other agencies that want to evaluate their programs. This brief describes the LI^2 framework, which is a structure for continuous quality improvement activities to address challenges in implementing programs and evaluations. This brief is a companion to a brief that discusses how to use data collected as part of the RPG cross-site evaluation to better understand implementation challenges as part of the Learn phase of LI^2.[3] This brief is written with RPG program staff, their local evaluators, and other partners in mind, but it could also be relevant to other program areas and organizations.

Exhibit 1. The Learn, Innovate, Improve cycle



What is LI^2, and how can it support " RPG projects?

In the three phases of LI^2 (Exhibit 1), teams identify the underlying causes of a challenge and assess their readiness for change (Learn); create innovative improvement strategies that are human centered and informed by science (Innovate); and test and refine strategies beginning on a small scale (Improve). Each phase builds on the previous one, but projects can start with any phase, depending on their situation and needs. Across the phases, LI^2 emphasizes the importance of using data and evidence to inform decision making. Data might come from many sources, including prior research, practice expertise from those who implement and evaluate programs, and locally collected qualitative and quantitative data. By making small data-driven improvements along the way, teams can develop solutions that are practical, effective, scalable, and sustainable.

RPG teams can use LI^2 to improve any aspect of implementation and evaluation (see Box 1). Before using the framework, RPG teams should consider which members of their team to involve and should think about the role of their local evaluation team (see Box 2).

What is involved in each phase of LI^2?

In this section, we summarize the key activities of each phase. Bolded terms in the text are defined in callout boxes (see Boxes 3, 5, and 6).

LEARN

The Learn phase helps grantees and their partners clarify why a change is needed and develop a common understanding of the specific problem(s) they are trying to solve. Even if the team members feel they already know what the problems are, team discussions during this phase can help better understand the **root causes** of those problems. The discussions can also help identify different but related issues that might need other solutions, and can promote shared understanding among team members. The Learn phase typically includes the following steps:

- **Meet to clarify the problem and discuss the need for change.** Project staff at all levels (frontline service providers, managers or supervisors, directors, and partners) meet to discuss why they feel changes are needed in program processes or procedures. This meeting might include local evaluation staff. A clear and shared understanding of the motivation for change promotes buy-in from the full team and guides next steps. Sharing data on the problem, if available, can inform the dialogue among staff and clarify the need for change. The team might also discover that multiple problems exist and will need to initially prioritize one issue for change.
- **Assess the project environment.** Project staff and partners, in collaboration with their local evaluator, assess the project environment to understand the factors that influence or contribute to the problem(s). Systematically examining data is an important part of this process. Data might include perspectives of frontline staff or managers; published research; and existing administrative data, such as data about enrollment and services that the team already collects. Teams might also benefit from collecting new qualitative or quantitative data (Box 4). For example, the team might examine if the workflow is proceeding properly; observe service delivery; walk through the program and evaluation enrollment processes from the perspective of clients and staff; or lead interviews and focus groups with frontline or supervisor staff, partners, or clients. As part of this process, the team should assess the kinds of changes they think the environment might be ready to support. Ultimately, team members should work to reach agreement on the specific problem(s) they are trying to solve, the factors contributing to the problem(s), whether the environment is ready to support a change, and the focus and starting point for change.

Box 1. Examples of RPG challenges that LI^2 can address

- Lower than expected referrals
- Eligible families not enrolling in the program and evaluation
- Inefficient enrollment procedures
- Lack of client engagement
- Frequent missed appointments by clients
- Communication challenges among RPG partners
- Low evaluation consent rates
- Low response rates to data collection

Box 2. Taking full advantage of the RPG team structure for implementing LI^2

When using LI^2, RPG teams should:

- **Include evaluation staff.** By design, all RPG teams include evaluators, and many teams include multiple research and data experts. Members of the evaluation team can be key partners throughout the LI^2 process. For example, they can help collect data to better understand a problem, provide guidance on prior research when the RPG team brainstorms solutions, and help plan what data need to be collected to understand how an innovation is working. The role of the local evaluation team during LI^2 will depend on staff availability, interest, skills, and overall project needs. Each project team should determine the role that makes sense for local evaluation staff.
- **Identify leaders.** The team should identify one or two team members that can lead each phase. This person might be different for each phase. For example, an RPG project director might want to lead the Learn and Innovate phases or might ask a program manager or a member of the local evaluation team to oversee those phases. For the Improve phase, a program manager and data lead might be well suited to work together to ensure innovations are being tested as planned.

Box 3. Key term for the Learn phase

Root cause—the core issue underlying a problem that a strategy should address.

Box 4. Topics to address when gathering data

Focusing on the following topics when gathering data can promote a strong understanding of the program environment:

- Community context
- Program context
- Infrastructure and staffing
- Service delivery process
- Performance management

- **Identify and engage the necessary partners for change.** Once teams clarify the need for change and assess the project environment, they might need to engage additional partners. Consider forming one or more teams, composed of leaders, RPG project staff, and evaluators. Each team should have clearly defined roles and responsibilities regarding the planned changes and the activities of LI^2. Including diverse perspectives at several levels within and outside the organization(s) can improve the quality and accuracy of the team's work.

Exhibit 2 has an example of how an RPG project can move through these steps in the Learn phase.

Exhibit 2. Example of addressing the challenge of low enrollment in the Learn phase

The RPG project director holds a meeting with frontline staff and managers from the grantee organization, their referral partners, and the local evaluator to discuss the problem of low enrollment. The team agrees they need more information about the project environment to understand the root cause of the problem. With the help of the evaluator, the team gathers information about the referral and enrollment processes by interviewing staff, reviewing documents that outline referral and enrollment procedures, and examining data on referral and enrollment numbers. To help the team understand if the environment is ready to support a change, team members also briefly speak with supervisors of frontline staff at partner organizations to better understand the environment they are working in. The team meets again to debrief. The team analyzes the data and reaches consensus that a likely cause of the problem is that referral partners are not sharing information with the grantee about all the potential clients who are eligible, because staff do not understand the eligibility rules and process.

The Innovate phase helps teams come up with potential solutions (innovations) for the problem(s) they identified and prioritized during the Learn phase. The Innovate phase typically includes the following steps:

- **Set parameters for the design process.** A written action plan can help organize the design work of the Innovate phase. As part of the plan, it is helpful to map out the problem(s) the team decided to solve, the approach the team will use for creating solutions, and the people who will develop potential solutions. It is important to think broadly about whose perspectives will be needed for creating solutions. For example, consider including the staff who will implement the changes, clients who will experience them, and evaluators and subject experts who can share research evidence. As part of the plan, it can be helpful to set a timeline for the design process and a goal for when the team will begin testing innovations.
- **Generate ideas in strategy sessions.** The team holds **strategy sessions** led by a facilitator to cocreate potential solutions using the approaches identified in the written action plan. It is important to explore a variety of ideas and allow for meaningful dialogue with all participants. Group facilitation strategies, such as **human-centered design** activities, are helpful for structuring the conversations.[4] Potential solutions should draw on research evidence, concepts from the behavioral and social sciences, and the local team's knowledge about who they are serving and the local context. RPG evaluators can help identify existing research evidence. The team should also discuss factors that might help or hinder the implementation of potential solutions (for example, challenges with the existing data systems or concerns about whether everyone involved would be ready for change). The team accounts for these factors as it plans to implement the potential solutions.

Box 5. Key terms for the Innovate phase

- **Strategy session**—a structured brainstorming and planning meeting to develop potential solutions to a problem.
- **Human-centered design**—a process of creative problem-solving that focuses on the people most affected by the problem to identify meaningful, empathic solutions. Human-centered design activities might be helpful during strategy sessions because they help everyone create and select ideas.
- **Road map for change**—a written summary of the specific changes the team plans to make, what the team hopes will occur as a result of the changes, what measurable success looks like, and factors outside the team's control that might affect the process.

- **Create a road map for change.** A **road map for change** summarizes information identified during the strategy sessions. The road map is a type of logic model. It includes details about what the team will do (for example, create an enrollment process with fewer steps), the influencing factors likely to help or hinder implementation of the solutions (for example, leadership buy-in and staff capacity), the strategies to help implement the solutions and address the influencing factors (for example, new staff training, new supervisory practices, or an incentive campaign), and what success looks like (for example, a higher percentage of potential clients enrolling). The road map for change helps confirm the logic that the potential solutions and implementation strategies are likely to lead to the measurable outcomes identified. The road map will also serve as the team's guide to testing solutions during the Improve phase.
- **Gather more information and prepare to test potential solutions.** To be ready to test new solutions in the Improve phase, the team might need to gather additional information. For example, they might need information on how to integrate a potential solution into an existing process, or input on materials such as manuals or forms that will be developed as part of the potential solution.

Exhibit 3 has an example of how an RPG project might move through the Innovate phase.

Exhibit 3. Example of addressing the challenge of low enrollment in the Innovate phase

The RPG project director and one of the managers from the grantee organization write an action plan that outlines how they will work toward solving the problem identified in Exhibit 2 (that referral partners are not sharing information about eligible clients with the grantee organization). During strategy sessions led by the local evaluator, the team identifies several strategies that might help solve the problem. As a starting point, they agree to focus on updating the training manual for referral partners and to retrain staff on the eligibility rules, the process for eligibility screening, and the process for sharing client information with the grantee organization. From there, the project director creates a road map for change that identifies the specific aspects of the manual and training procedures that need to change, the strategies they will use to implement the changes (including training, supervisory check-ins, and brief emails about the changes to raise awareness among staff), and the expected outcomes.

IMPROVE

In the Improve phase of LI^2, teams implement their potential solution (or select components of the solution) on a small scale. This typically begins with a **road test** to see how well the potential solutions identified in the Innovate phase work in practice, and quickly refine them, if needed. Most road tests are iterative—that is, they involve re-testing potential solutions multiple times to strengthen implementation quality and, ultimately, effectiveness. Road tests are guided by the road map for change created in the Innovate phase. By rapidly identifying and addressing challenges, teams can gradually make project changes that are sustainable and successful.

Box 6. Key terms for the Improve phase

- **Road test**—iterative, short testing cycles focused on assessing the implementation of a potential solution, with a focus on strengthening the design and implementation.
- **Learning questions**—questions to guide the road test activities that identify what a team hopes to learn and what they expect to change.

The Improve phase typically includes the following steps:

- **Develop learning questions and data collection methods for the test.** The team writes **learning questions** to guide the test. The learning questions should reflect what the team most wants to know and which outcomes they expect to change. The team also decides the information it will need to answer the learning questions and how to collect it.[5] Data collection might involve interviews, observations, focus groups, short feedback forms, or the enrollment and services data RPG projects already collect. Regardless of the data collection methods, the team should consider how to make the data collection instruments as brief and targeted as possible to reduce burden on the team. RPG evaluators can help develop the learning questions and data collection activities based on their evaluation expertise.
- **Implement the potential solutions identified for the test.** The team determines the length of time to test the potential solutions and implements them. For a road test, this typically occurs over four to six weeks, allowing the team enough time to implement and experience the potential solutions. However, this step can be completed more quickly if the potential solutions are easy and quick to implement (for example, when testing a new form for sharing information among various program staff).

- **Based on the data gathered, assess the implementation of the potential solutions**. Team members collect and analyze information based on their learning questions. This typically focuses on how well implementation is going, its strengths and weaknesses, and opportunities for improvement. Local evaluators or another research partner can lead this data collection and analysis or lend their expertise by collaborating with project staff.
- **Compile findings into a brief report, memo, or presentation.** Each test ends with a short report, memo, or presentation written by the staff who led the data collection and analysis, to summarize what the team learned. If needed, the product should identify ways to refine the solution based on the findings or identify new learning questions to explore in the next test. The product can also be used to engage other partners and invite their perspectives on the findings and potential next steps.
- **Repeat this process.** After completing one test, it is important for the team to consider what the next best test might be. For example, if the first road test focused on whether and how well staff could implement the solution, a second road test might explore participants' engagement and reactions.

With careful testing and tweaking, ideally the solution or solutions will meet the team's goals, but there are exceptions. A team might decide that, even with changes, the solution is not a good fit or that none of their tested solutions have resolved the problem as intended. In these cases, a team might decide to rethink how to address the problem and return to the Learn or Innovate phases. If the team thinks they need to better understand the underlying problem, they might return to the Learn phase. Or if they understand the problem but need to brainstorm new possible solutions or prioritize strategies to test, they might return to the Innovate phase.

Exhibit 4 presents an example of how an RPG project can conduct the Improve phase.

Exhibit 4. Example of addressing the challenge of low enrollment in the Improve phase

Using the road map for change, the RPG team develops their learning questions for the road test and decides to collect data from (1) observations of screening sessions; (2) a short survey of partner staff responsible for screening; and (3) program data on the number of potentially eligible participants, number of people screened in, and number of referrals. The team implements the new solution to revise the screening criteria and retrain partner staff on the criteria. Partner staff use the new criteria for four weeks, and then the team assesses how well implementation went. Although the team notes some success with the new strategy, they identify a further tweak to the screening process because one step continued to confuse partner staff. The project director and evaluator summarize the findings in a brief report. The team then decides to conduct a second road test of the tweak to the process and repeats the steps from the first road test: the team retrains partner staff on the revised process, implements the process for two weeks, collects data from the same sources, and summarizes the findings in a brief memo.

Summary and additional resources

This brief introduces RPG project grantees and partners to the LI^2 process. LI^2 is a CQI framework that emphasizes collaboration between practitioners and researchers, drawing on existing research, data, and practice wisdom. LI^2 incorporates sequential steps to help teams make and implement a plan for (1) deeply understanding their challenges and assessing the project environment's readiness for change, (2) developing targeted strategies to resolve the challenges, and (3) iteratively testing and improving those strategies.

Teams can use LI^2 to efficiently make incremental improvements to their partnerships, service delivery, and evaluations. These improvements might ultimately support them in meeting their RPG program and evaluation goals.

For more information and resources on LI^2, please visit https://mathematica.org/solutions/learn-innovate-improve.

Endnotes

[1] Derr, Michelle, Ann Person, and Jonathan McCay. "Learn, Innovate, Improve (LI2): Enhancing Programs and Improving Lives." OPRE Report #2017-108. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2017. Available at https://www.mathematica.org/publications/learn-innovate-improve-li2-enhancing-programs-and-improving-lives. This brief serves as the primary source for the current brief.

[2] For more information, see: Nilsen, P. "Making Sense of Implementation Theories, Models and Frameworks." Implementation Science, vol. 10, no. 53, April 21, 2015. Available at https://implementationscience.biomedcentral.com/articles/10.1186/s13012-015-0242-0; Liedtka, J., R. Salzman, and D. Azer. Design Thinking for the Greater Good: Innovation in the Social Sector. New York, NY: Columbia University Press, 2017; and Taylor, M.J., C. McNicholas, C. Nicolay, A. Darzi, D. Bell, and J.E. Reed. "Systematic Review of the Application of the Plan-Do-Study-Act Method to Improve Quality in Healthcare." BMJ Quality & Safety, vol. 23, 2014, pp. 290–298.

[3] Henke, J., and D. Robinson. "Continuous Quality Improvement: How Regional Partnership Grantees Can Use Data from the RPG Cross- Site Evaluation To Learn About Project Implementation." Evaluation Technical Assistance Brief, No. 7. Washington, DC: Mathematica, 2022. Available at https://www.mathematica.org/projects/regional-partnership-grants-national-cross-site-evaluation.

[4] For suggestions of human-centered design activities that can be used in LI[2], see: Michelle Derr, Jonathan McCay, and Ann Person. "The Innovate Phase: Co-creating Evidence-informed Solutions to Improve Human Services Programs." OPRE report 2019-45. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation, March 2019. Available at https://mathematica.org/publications/the-innovate-phase-co-creating-evidence-informed-solutions-to-improve-human-services-programs.

[5] For more guidance on designing a test, including a template, see: Derr, M. "Learn, Innovate, Improve: A Practice Guide for Enhancing Programs and Improving Lives." Washington, DC: Mathematica, 2022. Available at https://www.mathematica.org/publications/learn-innovate-improve-a-practice-guide-for-enhancing-programs-and-improving-lives.